MC 87-I-27C(P)

PRELIMINARY REPORT
INDUSTRY SERIES

1987 Census of Manufactures

MC87-I-27C(P)
Issued July 1989

GREETING CARDS; BOOKBINDING; PRINTING TRADE SERVICES

Industries 2771, 2782, 2789, 2791, and 2796

INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.[1]

INDUSTRY 2771, GREETING CARDS

In the 1987 Census of Manufactures, Industry 2771, Greeting Cards, had employment of 20.7 thousand. The employment figure was less than one percent below the 20.8 thousand reported in 1982. Compared with 1986, employment in 1987 increased 4 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was $2.9 billion.

In 1987, establishments in this industry accounted for 96 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 94. The products primary to this industry appear in table 2 and aggregated to $2.0 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $751.1 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2782, BLANKBOOKS AND LOOSELEAF BINDERS

In the 1987 Census of Manufactures, Industry 2782, Blankbooks and Looseleaf Binders, had employment of 39.0 thousand. The employment figure was 9 percent above the 35.9 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was $2.9 billion.

In 1987, establishments in this industry accounted for 93 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 92. The products primary to this industry appear in table 2 and aggregated to $2.7 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $898.3 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2789, BOOKBINDING AND RELATED WORK

In the 1987 Census of Manufactures, Industry 2789, Bookbinding and Related Work, had employment of 29.3 thousand. The employment figure was 15 percent above

[1] **Standard Industrial Classification Manual: 1987.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call **Susan Sundermann** (301) 763-2510.

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the 25.4 thousand reported in 1982. Compared with 1986, employment in 1987 increased 3 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total receipts for establishments classified in this industry was $1.2 billion.

In 1987, establishments in this industry accounted for 94 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 91. The products primary to this industry appear in table 2 and aggregated to $1.1 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $273.4 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2791, TYPESETTING

In the 1987 Census of Manufactures, Industry 2791, Typesetting, had employment of 37.7 thousand. The employment figure was 12 percent above the 33.7 thousand reported in 1982.

The total receipts for establishments classified in this industry was $1.8 billion.

In 1987, establishments in this industry accounted for 83 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 88. The products primary to this industry appear in table 2 and aggregated to $2.0 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $311.8 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2796, PLATEMAKING SERVICES

In the 1987 Census of Manufactures, Industry 2796, Platemaking Services, had employment of 31.8 thousand.

The total receipts for establishments classified in this industry was $2.4 billion.

In 1987, establishments in this industry accounted for 90 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). The products primary to this industry appear in table 2 and aggregated to $2.5 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to $612.3 million in 1987. Data on specific materials consumed appear in table 3.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

CONTACTS FOR DATA USERS

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Durables	Kenneth Hansen	(301) 763-7304
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Import/Export Publications	Foreign Trade Division	(301) 763-5140
Industry Analysis and Forecasts	International Trade Administration	(202) 377-4356

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix.]

Year[1]	Companies[2] (no.)	All establishments[3]		All employees		Production workers			Value added by manufacture[4] (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of-year inventories[4] (million dollars)	Ratios	
		Total (no.)	With 20 employees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Specialization (percent)	Coverage (percent)
INDUSTRY 2771, GREETING CARDS															
1987 Census	(NA)	161	62	20.7	459.4	11.2	20.6	197.2	2 194.8	751.1	2 877.3	59.9	378.0	82	96
1986 ASM	(NA)	(NA)	(NA)	20.0	407.4	10.8	19.3	174.0	2 036.2	620.2	2 681.4	48.4	319.6	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	19.9	397.5	10.8	17.7	166.9	1 894.8	672.9	2 598.0	46.5	240.3	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	19.8	386.2	10.8	18.4	169.2	1 667.0	748.8	2 394.2	91.0	277.5	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	22.5	381.6	13.5	21.0	170.0	1 611.2	066.4	2 250.6	51.1	261.5	(NA)	(NA)
1982 Census	139	154	54	20.8	344.2	11.7	20.2	155.2	1 348.8	554.6	1 893.6	37.2	220.5	75	94
1981 ASM	(NA)	(NA)	(NA)	20.8	349.2	11.8	25.4	159.4	1 264.7	659.0	1 903.6	71.3	213.6	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	21.1	306.2	11.8	25.6	140.7	1 014.7	582.5	1 596.2	51.0	184.2	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	20.7	275.0	12.3	26.6	129.3	885.0	495.4	1 366.2	49.6	179.1	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	19.8	238.2	11.2	24.5	112.2	773.4	402.7	1 181.5	25.8	153.2	(NA)	(NA)
1977 Census	155	166	52	18.1	226.8	10.6	21.7	105.8	655.9	364.9	1 072.1	18.8	160.6	78	95
1976 ASM	(NA)	(NA)	(NA)	18.3	213.7	9.9	19.5	98.2	606.5	304.9	906.7	[5]15.9	208.8	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	19.2	194.8	9.9	19.0	93.1	559.1	302.0	860.8	15.9	210.0	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	21.8	193.3	10.9	20.8	93.4	644.5	286.5	923.6	[5]13.1	212.3	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	24.5	198.2	11.8	23.7	95.8	530.6	296.9	816.5	33.6	208.0	(NA)	(NA)
1972 Census	186	199	82	23.5	191.5	12.4	24.1	93.9	527.0	261.4	774.4	46.4	190.7	76	97
INDUSTRY 2782, BLANKBOOKS AND LOOSELEAF BINDERS															
1987 Census	(NA)	506	324	39.0	766.2	29.5	57.5	495.6	2 014.0	898.3	2 897.9	87.3	304.5	89	93
1986 ASM	(NA)	(NA)	(NA)	33.0	708.4	25.4	52.6	459.5	1 792.2	864.1	2 640.1	[5]79.6	279.4	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	33.3	672.1	25.4	51.8	437.7	1 642.3	819.7	2 463.2	[5]82.4	254.6	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	33.2	629.6	24.9	50.0	418.1	1 518.7	791.3	2 305.3	84.9	262.8	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	36.9	635.0	28.8	55.7	424.8	1 606.0	735.4	2 335.5	60.9	255.8	(NA)	(NA)
1982 Census	333	474	296	35.9	564.8	28.0	52.9	380.5	1 379.5	671.0	2 039.4	50.5	244.6	86	92
1981 ASM	(NA)	(NA)	(NA)	36.6	523.4	28.6	58.6	372.1	1 243.7	606.5	1 843.9	[5]46.6	198.8	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	36.5	476.5	29.4	57.7	341.8	1 150.1	578.3	1 718.1	[5]77.3	192.6	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	34.1	414.8	27.9	55.1	303.6	945.8	531.4	1 464.5	[5]75.4	172.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	34.3	383.1	27.7	53.3	266.1	856.3	450.1	1 292.2	44.3	152.8	(NA)	(NA)
1977 Census	373	505	288	31.8	338.5	25.2	49.8	235.0	739.9	396.9	1 122.6	36.0	130.2	86	91
1976 ASM	(NA)	(NA)	(NA)	26.3	253.5	21.3	40.5	178.2	565.9	308.0	875.8	21.0	104.0	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	25.7	229.7	20.6	38.9	158.3	513.4	270.4	789.3	21.9	96.9	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	27.4	223.4	22.4	44.7	158.7	474.5	261.9	728.8	18.6	107.9	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	28.0	215.2	23.0	45.9	155.6	430.9	243.3	667.0	15.8	97.0	(NA)	(NA)
1972 Census	376	461	240	26.6	192.7	22.0	43.2	139.8	390.6	206.3	591.1	14.4	79.6	89	90
INDUSTRY 2789, BOOKBINDING AND RELATED WORK															
1987 Census	(NA)	1 024	365	29.3	491.7	24.4	47.6	355.8	897.4	273.4	1 165.0	47.7	100.9	95	94
1986 ASM	(NA)	(NA)	(NA)	28.5	458.5	23.2	44.6	337.7	803.7	249.1	1 048.2	[5]39.5	91.5	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	27.9	402.0	23.2	39.3	297.2	670.5	216.2	890.4	[5]36.2	80.9	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	27.5	404.4	22.5	42.7	295.0	659.8	215.3	876.8	[5]28.3	78.5	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	25.8	365.5	22.2	41.6	275.1	647.6	207.1	845.6	[5]30.8	73.6	(NA)	(NA)
1982 Census	991	1 013	335	25.4	338.3	21.7	39.7	255.1	584.0	183.3	763.5	27.3	60.9	96	91
1981 ASM	(NA)	(NA)	(NA)	29.3	352.3	25.4	45.2	264.2	631.1	202.1	828.2	[5]25.2	66.5	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	30.6	337.5	26.8	47.0	258.5	610.5	180.6	780.0	20.9	72.7	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	29.7	306.9	26.2	47.4	233.1	548.2	152.6	691.7	[5]22.6	61.9	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	26.0	263.2	22.5	41.3	196.8	443.2	139.8	590.4	[5]25.7	43.7	(NA)	(NA)
1977 Census	974	987	288	24.1	240.6	20.9	38.8	183.6	408.8	126.0	533.6	19.3	45.7	96	94
1976 ASM	(NA)	(NA)	(NA)	20.3	192.7	17.7	34.2	147.7	354.4	109.8	467.0	[5]15.3	37.1	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	21.1	186.9	18.3	34.1	144.5	342.6	100.0	446.3	[5]10.8	32.5	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	23.4	188.2	20.4	38.0	146.7	350.3	94.5	448.3	[5]12.0	32.1	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	24.9	187.6	21.6	40.3	146.1	313.8	86.4	401.0	5.8	28.1	(NA)	(NA)
1972 Census	990	1 004	301	25.1	178.9	22.0	40.5	139.1	296.2	78.3	377.2	11.2	25.1	95	89
INDUSTRY 2791, TYPESETTING															
1987 Census	(NA)	3 318	437	37.7	815.3	29.5	56.4	567.7	1 490.5	311.8	1 804.3	74.5	126.3	96	83
1986 ASM	(NA)	(NA)	(NA)	33.6	686.6	26.0	49.5	477.8	1 282.5	311.8	1 593.1	[5]72.1	112.1	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	34.5	665.9	27.1	48.9	479.6	1 223.5	277.9	1 503.9	67.2	114.9	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	34.7	636.3	27.6	50.7	467.2	1 205.3	266.3	1 462.3	57.2	123.0	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	34.7	588.4	27.9	51.7	431.8	1 138.5	248.2	1 384.2	[5]65.6	115.6	(NA)	(NA)
1982 Census	3 045	3 075	415	33.7	570.6	26.5	49.0	418.3	1 040.2	210.0	1 242.9	64.3	110.6	97	88
1981 ASM	(NA)	(NA)	(NA)	34.7	511.4	27.6	49.0	360.8	907.8	172.3	1 080.8	[5]50.9	70.0	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	34.9	489.9	28.0	49.5	345.1	858.4	190.8	1 056.4	[5]63.1	73.9	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	33.5	447.3	27.2	50.8	317.5	762.3	150.8	919.0	[5]53.4	60.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	27.7	395.0	22.3	42.6	292.1	696.7	113.9	810.5	[5]42.3	46.5	(NA)	(NA)
1977 Census	2 370	2 406	389	27.2	364.7	21.7	38.8	271.6	623.4	110.5	730.6	36.7	42.5	97	89
1976 ASM	(NA)	(NA)	(NA)	23.6	269.5	19.0	34.3	202.9	450.1	74.6	524.9	[5]27.8	26.7	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	24.6	261.7	19.7	36.0	197.3	419.7	64.6	482.3	[5]20.8	30.3	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	25.5	281.6	20.8	40.0	214.7	453.1	53.2	503.0	[5]19.9	28.4	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	24.7	269.2	20.0	36.8	205.7	428.8	59.6	490.5	[5]13.1	24.6	(NA)	(NA)
1972 Census	1 858	1 887	373	26.0	269.8	21.1	38.1	205.9	426.0	58.1	482.8	14.2	25.3	97	91
INDUSTRY 2796, PLATEMAKING SERVICES[6]															
1987 Census	(NA)	1 409	459	31.8	959.4	22.1	45.2	619.2	1 738.0	612.3	2 355.7	115.4	141.3	97	90

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 2771, 4%; SIC 2782, 18%; SIC 2789, 19%; SIC 2791, 23%; SIC 2796, 18%.

[1]In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry chapter.

[2]For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

[3]Includes establishments with payroll at any time during year.

[4]Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture reported for 1982 and later years are not comparable to prior-year data.

[5]Estimates for new capital expenditures have associated standard error of 15 percent or more and may be of limited reliability. Estimates for other data items are of acceptable reliability.

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years—Con.

[1]Industry definition is new for 1987 Census of Manufactures. An explanation of the Standard Industrial Classification revision will appear in the final industry series text that supercedes this report.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text.]

1987 product code	Product	1987			1982		
		Number of companies with shipments of $100,000 or more	Product shipments[1]		Number of companies with shipments of $100,000 or more	Product shipments[1]	
			Quantity[2]	Value (million dollars)		Quantity[2]	Value (million dollars)
2771- —	**GREETING CARDS**						
	Total	**(NA)**	**(X)**	**2 025.3**	**(NA)**	**(X)**	**1 395.2**
27711 —	Greeting cards, publishers' sales	(NA)	(X)	1 815.2	(NA)	(X)	1 254.8
	Christmas cards:						
27711 13	Counter cards — millions	9	(S)	139.2	10	329.3	123.2
27711 15	Packaged cards, including boxed cards — do	18	(S)	173.2	24	*1 524.8	125.5
	Valentine cards:						
27711 22	Counter cards — millions	6	(S)	109.9	7	267.3	102.3
27711 24	Packaged cards, including boxed cards — do	4	(S)	18.1	6	388.6	12.5
27711 26	Mother's Day cards — do	8	(S)	80.2	7	143.8	67.1
27711 27	Easter cards — do	8	(S)	62.2	8	407.6	138.0
27711 29	Seasonal cards other than Christmas, Valentine, Easter, and Mother's Day — do	9	(S)	187.9			
	Everyday cards:						
27711 33	Counter cards — millions	11	(S)	938.9	13	1 438.1	595.8
27711 35	Packaged cards, including boxed cards — do	9	(S)	52.3	11	**286.7	22.7
27711 00	Greeting cards, publishers' sales, n.s.k.	(NA)	(X)	53.3	(NA)	(X)	67.7
27712 —	Greeting cards, printed for publication by others:						
27712 00	Greeting cards, printed for publication by others	32	(X)	78.9	54	(X)	88.0
27710 —	Greeting cards, n.s.k.	(NA)	(X)	131.2	(NA)	(X)	52.4
27710 00	Greeting cards, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(X)	80.0	(NA)	(X)	26.6
27710 02	Greeting cards, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	51.2	(NA)	(X)	25.8

1987 product code	Product	1987		1982	
		Number of companies with receipts of $100,000 or more	Value of product receipts[1] (million dollars)	Number of companies with receipts of $100,000 or more	Value of product receipts[1] (million dollars)
2782- —	**BLANKBOOKS AND LOOSELEAF BINDERS**				
	Total	**(NA)**	**2 661.2**	**(NA)**	**1 874.6**
27823 —	Checkbooks:				
27823 00	Checkbooks (including inserts and refills, but excluding those in continuous form and die-cut)	19	1 160.6	(NA)	776.6
27824 —	Blankbook making, except checkbooks:				
27824 00	Blankbook making, except checkbooks, including albums and scrapbooks, except looseleaf	49	327.0	43	279.5
27825 —	Looseleaf binders and devices:				
27825 00	Looseleaf binders and devices	139	904.1	149	652.8
27820 —	Blankbooks and looseleaf binders, n.s.k.	(NA)	269.5	(NA)	165.7
27820 00	Blankbooks and looseleaf binders, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	195.0	(NA)	123.8
27820 02	Blankbooks and looseleaf binders, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	74.5	(NA)	41.9
2789- —	**BOOKBINDING AND RELATED WORK**				
	Total	**(NA)**	**1 138.7**	**(NA)**	**765.9**
27891 —	Edition, library, and other hardcover bookbinding (excluding books published and bound or printed and bound at the same establishment)	(NA)	221.2	(NA)	183.0
	Edition binding, hardbound:				
27891 10	Elementary, high school, and college textbooks; and technical, scientific, business, and professional books (all grades, K-13 and higher, including textbook-related teachers' editions, manuals, etc.; private business and secretarial schools; and post high school vocational schools, institutes, and training courses)	23	45.7	37	27.3
27891 13	General consumer and trade books (including adult and juvenile trade books, book club, and direct mail books)	36	43.7	35	41.8
27891 25	All other books, not elsewhere classified, including religious and reference books (bibles, testaments, hymnals, devotionals, dictionaries, thesauruses, atlases, etc.)	28	22.8	31	45.2
27891 41	Library binding (including rebinding and prebinding of books for library use), hardcover binding of periodicals and records, and other hardcover binding, except edition	40	79.6	51	62.1
27891 00	Edition, library, and other hardcover bookbinding, n.s.k.	(NA)	29.4	(NA)	6.5

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987		1982	
		Number of companies with receipts of $100,000 or more	Value of product receipts[1] (million dollars)	Number of companies with receipts of $100,000 or more	Value of product receipts[1] (million dollars)
2789- —	**BOOKBINDING AND RELATED WORK**—Con.				
27892 —	Other book and pamphlet binding and related binding work (material printed elsewhere)	(NA)	637.6	(NA)	435.8
	Soft cover binding of books (49 pages or more, exclusive of the covers):				
27892 23	Adhesive binding	73	60.0	75	38.8
27892 24	Mechanical binding	87	66.4	62	31.0
	Pamphlet and other soft cover binding:				
27892 25	Adhesive binding	56	42.6	59	42.9
27892 26	Mechanical binding	166	138.9	177	115.6
27892 81	Sample books, swatches, and cards; color, carpet, upholstery, drapery, etc.	72	205.1	183	194.7
27892 92	Receipts for miscellaneous bookbinding work; embossing, varnishing, indexing, mounting, and other service operations related to bookbinding	125	97.5		
27892 00	Other book and pamphlet binding and related work, n.s.k.	(NA)	25.1	(NA)	12.7
27890 —	Bookbinding and related work, n.s.k.	(NA)	279.9	(NA)	147.1
27890 00	Bookbinding and related work, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	254.1	(NA)	119.0
27890 02	Bookbinding and related work, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	25.8	(NA)	28.1
2791- —	**TYPESETTING**				
	Total	**(NA)**	**2 041.3**	**(NA)**	**1 330.9**
27910 —	Typesetting:				
27910 11	Hot metal and related typesetting, including all hand and machine typesetting, composition, and other such typographic services involving metal and not associated with photographic-film typesetting or direct-impression typesetting and their related processes	102	129.9	145	83.7
27910 15	Direct-impression typesetting, including all nonmetallic, nonphotographic typesetting and composition normally produced by direct impression of a typewriter mechanism, as well as subsequent associated procedures and related processes	56	33.8	37	19.8
	Photographic typesetting, including phototypesetting, photolettering, and other such typographic processes and services which employ photographic equipment and/or photographic materials and techniques:				
27910 16	With capability to integrate text and graphics	364	846.9	(NA)	730.1
27910 18	All other photographic typesetting	315	334.1		
27910 00	Typesetting, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	535.2	(NA)	349.8
27910 02	Typesetting, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	161.3	(NA)	147.5
2796- —	**PLATEMAKING SERVICES**				
	Total	**(NA)**	**2 475.9**	**(NA)**	**[r]1548.5**
27961 —	Lithographic plates	(NA)	208.1	(NA)	[r]189.5
27961 13	Diazo-type plates (exposed, prepared for printing)	77	60.1	62	[r]63.4
27961 15	Wipe-on plates	35	40.2	44	[r]27.1
27961 17	Deep-etch plates	11	10.7	13	10.6
27961 23	Multimetal plates	8	13.6	14	15.8
27961 29	All other lithographic plates	92	45.2	64	32.5
27961 00	Lithographic plates, n.s.k.	(NA)	38.2	(NA)	40.1
27962 —	Lithographic platemaking services	(NA)	1 409.0	(NA)	748.3
27962 31	Color corrected process positives or negatives on film	375	987.2	286	520.1
27962 39	All other lithographic film	193	159.4	167	112.7
27962 41	Assembled flats for platemaking	202	161.5	128	83.7
27962 00	Lithographic platemaking services, n.s.k.	(NA)	100.8	(NA)	31.8
27963 —	Platemaking services, except lithographic	(NA)	548.5	(NA)	444.1
	Duplicate plates for letterpress:				
27963 15	Rubber plates	24	31.2	49	38.9
27963 25	Photopolymer (plastics) plates	25	58.3	25	50.1
27963 35	Other	16	15.7	15	7.4
27963 40	Engraving plates made for others, including intaglio plates	12	12.6	14	16.3
	Flexographic plates:				
27963 45	Natural and synthetic rubber	41	44.0	(NA)	[3]
27963 47	Photopolymer	49	30.8	(NA)	[3]
27963 72	Preparation of film for gravure cylindermaking	18	25.2	(NA)	[4]
27963 53	Gravure plates and cylinders made for others	30	118.6	40	89.9
	Photoengraving plates made for others:				
27963 61	Copper	9	10.7	19	24.1
27963 63	Magnesium	67	32.7	65	28.1
27963 65	Other, including zinc	22	20.0	(NA)	28.5
27963 67	Electrotyping and stereotyping duplicate plates made for others, including matrices	4	2.9	(NA)	4.9
27963 71	Other plates made for others, except lithographic, n.e.c.	19	11.2	(NA)	[3]11.6
27963 73	Other platemaking services, except lithographic, n.e.c.	22	27.9	(NA)	[4]89.1
27963 00	Platemaking services, except lithographic, n.s.k.	(NA)	106.6	(NA)	55.2

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987		1982	
		Number of companies with receipts of $100,000 or more	Value of product receipts[1] (million dollars)	Number of companies with receipts of $100,000 or more	Value of product receipts[1] (million dollars)
2796- —	**PLATEMAKING SERVICES**—Con.				
27960 --	Platemaking services, n.s.k.	(NA)	310.2	(NA)	166.6
27960 00	Platemaking services, n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	241.1	(NA)	111.9
27960 02	Platemaking services, n.s.k, typically for establishments with less than 5 employees (see note)	(NA)	69.1	(NA)	54.7

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

[1]Data reported by all producers, not just those with shipments of $100,000 or more.
[2]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).
[3]For 1982, product codes 2796345 and 2796347 were included in product code 2796371.
[4]For 1982, product code 2796372 was included in product code 2796373.

Table 3. Materials Consumed by Kind: 1987 and 1982

[Includes cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987 delivered cost (million dollars)	1982 delivered cost (million dollars)
	INDUSTRY 2771, GREETING CARDS		
	Materials, parts, and supplies	**495.9**	**404.9**
262131	Coated papers, all types	56.7	29.8
262140	Uncoated papers	92.1	113.8
289301	Printing inks (complete formulations)	10.6	6.5
265001	Paperboard containers and boxes, and corrugated paperboard	13.1	8.0
267700	Purchased envelopes	8.8	10.2
970099	All other materials and components, parts, containers, and supplies	258.7	178.0
971000	Materials, containers, and supplies, n.s.k.[2]	55.9	58.6

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2782, BLANKBOOKS AND LOOSELEAF BINDERS				
	Materials, parts, and supplies	**(X)**	**773.4**	**(X)**	**611.3**
	Paper:				
262142	Bond 1,000 s tons	79.9	87.2	92.5	87.6
262103	All other paper do	(S)	82.7	(S)	74.2
263105	Paperboard (news, chip, pasted, tablet, check, binders board), except for shipping	(X)	53.0	(X)	33.9
265001	Paperboard containers and boxes, and corrugated paperboard	(X)	21.4	(X)	[3]
229507	Coated or impregnated woven and nonwoven fabrics, except rubberized	(X)	13.7	(X)	11.1
278228	Metal looseleaf components, ring type	(X)	60.1	(X)	37.0
278229	All other metal looseleaf components	(X)	5.1	(X)	5.5
308011	Plastics looseleaf components (excluding sheet lifters)	(X)	4.9	(X)	9.5
308001	Plastics film and sheets	(X)	43.8	(X)	31.6
308003	All other plastics consumed, except looseleaf devices and components	(X)	16.4	(X)	9.9
331094	Steel, strip and wire	(X)	13.6	(X)	26.6
970099	All other materials and components, parts, containers, and supplies	(X)	146.0	(X)	[3]141.1
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	225.5	(X)	143.3

See footnotes at end of table.

Table 3. **Materials Consumed by Kind: 1987 and 1982**—Con.

[Includes cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity[1]	Delivered cost (million dollars)	Quantity[1]	Delivered cost (million dollars)
	INDUSTRY 2789, BOOKBINDING AND RELATED WORK				
	Materials, parts, and supplies	**(X)**	**218.8**	**(X)**	**152.2**
	Paper:				
262142	Bond ... 1,000 s tons	(S)	2.4	(S)	.8
262103	All other paper ... do	(S)	20.6	(S)	11.0
263105	Paperboard (news, chip, pasted, tablet, check, binders board), except for shipping	(X)	14.1	(X)	18.0
265001	Paperboard containers and boxes, and corrugated paperboard	(X)	8.3	(X)	[3]
229507	Coated or impregnated woven and nonwoven fabrics, except rubberized	(X)	16.2	(X)	11.3
278228	Metal looseleaf components, ring type	(X)	3.1	(X)	2.0
278229	All other metal looseleaf components	(X)	1.6	(X)	.7
308011	Plastics looseleaf components (excluding sheet lifters)	(X)	2.3	(X)	1.0
308001	Plastics film and sheets	(X)	4.1	(X)	2.6
308003	All other plastics consumed, except looseleaf devices and components	(X)	.6	(X)	.3
331094	Steel, strip and wire	(X)	3.1	(X)	2.0
970099	All other materials and components, parts, containers, and supplies	(X)	63.2	(X)	[3]48.8
971000	Materials, parts, and supplies, n.s.k.[2]	(X)	79.2	(X)	53.7

1987 material code	Material	1987 delivered cost (million dollars)	1982 delivered cost (million dollars)
	INDUSTRY 2791, TYPESETTING		
	Materials, parts, and supplies	**210.0**	**161.8**
386153	Unexposed diazo type lithographic plates, presensitized	.6	1.4
279610	Other lithographic plates, exposed or unexposed	1.6	[4](*)
386155	Light sensitive films	20.5	12.9
386166	Light sensitive papers	16.9	9.7
262100	Paper, all types except light sensitive, including newsprint, book, bond, cover, and coated	24.5	8.7
970099	All other materials and components, parts, containers, and supplies	23.3	[4]19.8
971000	Materials, parts, and supplies, n.s.k.[2]	122.6	109.3
	INDUSTRY 2796, PLATEMAKING SERVICES		
	Materials, parts, and supplies	**491.7**	**(NA)**
386153	Unexposed diazo type lithographic plates	4.4	
279610	Other lithographic plates, exposed or unexposed	8.2	
330005	Metal for printing plates	32.2	
386155	Light sensitive films	59.9	
386166	Light sensitive papers	8.3	
386171	Color proofing materials	27.5	(NA)
262100	Paper, all types except light sensitive, including newsprint, book, bond, cover, and coated	22.0	
970099	All other materials and components, parts, containers, and supplies	143.1	
971000	Materials, parts, and supplies, n.s.k.[2]	186.1	

[1]For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

[2]Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

[3]For 1982, material code 265001 was included in material code 970099.

[4]For 1982, material code 279610 was included in material code 970099.

APPENDIX
Scope and Coverage and Explanation of Terms

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which service manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

Number of establishments and companies–A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

All employees–Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

Production workers–Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., powerplant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

Other employees–Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

Payroll–Includes the gross earnings for the "employees" defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

Production-worker hours–Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials–Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

Specific materials consumed (table 3)–In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Establishments consuming less than a specified amount (usually $10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

Value of shipments and other receipts–Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

Shipments or production of individual products (table 2)–In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

Value added by manufacture–This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Expenditures for new plant and equipment–Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

End-of-year inventories–Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

Specialization and coverage ratios–An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishments' shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

Specialization ratio–Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio–Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.